| | |
|---|---|
| 13952846 | sec-Butylamine |
| 14017415 | Cobaltous sulfamate |
| 14216752 | Nickel nitrate |
| 14258492 | Ammonium oxalate |
| 14307358 | Lithium chromate |
| 14307438 | Ammonium tartrate |
| 14639975 | Zinc ammonium chloride |
| 14639986 | Zinc ammonium chloride |
| 14644612 | Zirconium sulfate |
| 15699180 | Nickel ammonium sulfate |
| 16721805 | Sodium hydrosulfide |
| 16871719 | Zinc silicofluoride |
| 16919190 | Ammonium silicofluoride |
| 16923958 | Zirconium potassium fluoride |
| 25154545 | Dinitrobenzene |
| 25154556 | Nitrophenol |
| 25155300 | Sodium dodecylbenzenesulfonate |
| 25167822 | Trichlorophenol |
| 25168154 | 2,4,5-T ester |
| 25168267 | 2,4-D ester |
| 26264062 | Calcium dodecylbenzenesulfonate |
| 27176870 | Dodecylbenzenesulfonic acid |
| 27323417 | Triethanolamine dodecylbenzenesulfonate |
| 27774136 | Vanadyl sulfate |
| 28300745 | Antimony potassium tartrate |
| 30525894 | Paraformaldehyde |
| 36478769 | Uranyl nitrate |
| 37211055 | Nickel chloride |
| 42504461 | Dodecylbenzenesulfonate isopropanolamine |
| 52628258 | Zinc ammonium chloride |
| 52740166 | Calcium arsenite |
| 53467111 | 2,4-D ester |
| 55488874 | Ferric ammonium oxalate |
| 61792072 | 2,4,5-T ester |

[FR Doc. 78-6339 Filed 3-10-78; 8:45 am]

---

[6560-01]

[FRL 829-3]

## PART 117—DETERMINATION OF REMOVABILITY OF HAZARDOUS SUBSTANCES

AGENCY: Environmental Protection Agency.

ACTION: Final rulemaking.

SUMMARY: This regulation establishes new rules for the determinination of the removability of hazardous substances as required under a provision of the Federal Water Pollution Control Act. This regulation should be read in conjunction with other new regulations for hazardous substances which are also being promulgated today in this same separate part of the FEDERAL REGISTER, and which designate hazardous substances, harmful quantities, and rates of penalty.

EFFECTIVE DATE: June 12, 1978, except for vessels. For vessels the effective date is September 11, 1978.

FOR FURTHER INFORMATION CONTACT:

Kenneth M. Mackenthun, Director, Criteria and Standards Division (WH-585), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460 (phone: 202-755-0100).

SUPPLEMENTARY INFORMATION: On December 30, 1975, a document was published in the FEDERAL REGISTER (40 FR 59977) proposing to create a new part 117 in Title 40 of the Code of Federal Regulations. it was a proposed determination of actual removability under section 311(b)(2)(B)(i) of the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.) (the Act) for substances proposed as hazardous substances under Section 311(b)(2)(A) of the Act (40 FR 59960). At the same time, the designation of hazardous substances, determination of harmful quantities and determination of penalty rates were proposed as Parts 116, 118 and 119 respectively. Final promulgation of those regulations is concurrent with this rulemaking.

Interested persons were given until March 1, 1976 to submit written comments on all aspects of the proposed rules. Each of the comments received has been carefully considered in adopting the final rules which are promulgated at this time.

1. *Removability of oil-like substances.* A number of commenters expressed the opinion that certain of the proposed hazardous substances could actually be removed from the water after discharge. After reviewing the comments, physical-chemical data, and existing oil removal technology, it is agreed that some designated substances can actually be removed under most conditions of discharge. It is noted that these substances have limited water solubility, a relatively cohesive mass and are less dense than water. Thus, they resemble petroleum oils in their behavior when discharged to water. The substances can be described as those with specific gravities less than 1.0 and water solubility less than 1,000 mg/l. Accordingly, the final rule makes the determination that amyl acetate, ethylbenzene, xylene, allyl chloride, benzene, cyclohexane, isoprene, methyl methacrylate, styrene, and toluene can actually be removed.

2. *Definition of removability.* Many comments dealing with the question of removability expressed alternative interpretations from that proposed by the Agency. The basic issue is that section 311(a)(8) defines the term remove or removal as follows. "(8) 'remove or removal' refers to removal of the oil or hazardous substances from the water and shorelines or the taking of such other actions as may be necessary to minimize or mitigate damage to the public health or welfare, including, but not limited to, fish, shellfish, wildlife, and public and private property, shorelines, and beaches."

It was recognized that for every substance it may be possible to take some action to minimize or mitigate damages to public health or welfare depending on the circumstances of the discharge. Thus, commenters argued that under this part of the definition of remove or removal, all substances should be determined to be removable.

However, section 311(b)(2)(B)(i) requires a determination whether any designated substance can *actually* be *removed* (emphasis added). The Agency's proposal stated that this determination of actual removability was separable from the definition of remove or removal found in Section 311(a)(8) and referred only to the actual physical, chemical, or biological separation of the substance from the water.

With regard to the question of actual removability, the chemical, physical, or biological separation of a pollutant from the water or shorelines depends upon the hydrological characteristics of the receiving water at least as much as upon the properties of the substances. In general a substance when discharged to a contained water body of limited size often can actually be removed to some degree from that water body or shoreline. On the other hand, such substances when discharged to a large free flowing water body cannot, in general, be effectively separated from the water. Often it is the water body and other circumstances surrounding the discharge that dictate the success of attempts to actually remove the substance. However section 311 requires that the determination of actual removability be made with respect to designated substances rather than receiving water bodies. In addition, section 311 also applies to discharges to the shorelines of the navigable waters. Discharges of designated substances which result in contaminated shorelines can nearly always be physically or chemically removed to some degree from the shoreline. Thus, for substances other than those identified as actually removable, there is no clear *a priori* determination of removability which will satisfy *all* potential discharge situations. In effect, many substances are only partially removable and therefore also partially nonremovable. As stated in the proposed rulemaking, the intent of section 311 and the implementing regulations is the prevention of discharges of hazardous substances. A determination that all substances are actually removable would negate the incentives for cleaner operation and more careful handling provided by the civil penalties in those circumstances where discharges, while subject to mitigation, cannot be actually removed. Therefore, the Agency has determined that the most satisfactory definition, and the one which best satisfies the congressional intent, is to define oil-like hazardous substances as actually removable, and to define other, less generally removable hazardous substances, as not actually removable. Such non-oil-like hazardous substances can on occasion be partially removed from the water or adjoin-

ing shorelines. On the whole, however, such substances will not in fact be removable and so are properly designated as "not actually removable." Since Congress has in essence defined oil as removable, it is logical to define substances with oil-like physical characteristics as removable.

As noted previously in the Preamble to this Part 117 some substances have been described as oil-like on the basis of similarity in behavior to oil when discharged to water, i.e., limited solubility, less dense than water, and relatively cohesive mass. The Act defines oil in narrative form but left to the Agency the responsibility for designating and therefore, defining hazardous substances. The Agency defined hazardous substances in Part 116 on the basis of toxicological effects. For Part 117 the Agency developed a rationale to distinguish between oils and oil-like hazardous substances. That rationale is as follows:

I. If the substance is petroleum derived and:

A. If it *has* a defined chemical structure, it is a candidate hazardous substance.

B. If the substance's chemical structure is not defined and if it contains both:

1. mixtures of isomers, and

2. Members of a homologous series, i.e., series of organic compounds with members differing from successive members by increments of CH2, the substance is classified as a petroleum oil and is not covered by these regulations.

II. If the substance is non-petroleum derived and:

A. If it is not an organic solvent extractable, it is a candidate hazardous substance.

B. If it is organic solvent extractable and:

1. If it *has* a defined chemical structure, it is a candidate hazardous substance.

2. If the substance's chemical structure is not defined and if it contains both:

(a) mixtures of isomers, and

(b) member of a homologous series, the substance is covered by these regulations.

On the basis of the foregoing, the ten oil-like substances previously identified have been determined to be removable hazardous substances.

The proposed regulation, under §117.3, made the determination that discharges of substances that are not actually removable are nonetheless subject to damage mitigation actions taken under Section 311(c). Section 57 of the Clean Water Act (Pub. L. 95-217) provides (in new section 311(b)(2)(B)(v)) that the Administrator may act to mitigate the damage caused by discharges of nonremovable hazardous substances and that the cost of such mitigation is to be deemed a cost incurred under Section 311(c) and thus recoverable from the responsible person under sections 311 (f) or (g).

3. *Guidelines for Mitigation:*

Several commenters addressed the need for guidelines on methods and procedures for removal or mitigation of discharges of hazardous substances.

Section 311(j)(1)(A) requires the promulgation of removal regulations. These regulations will be developed in cooperation with the U.S. Coast Guard. Until such time as those regulations are promulgated, appropriate damage mitigation actions are those reasonable steps taken to contain, neutralize, and remove the substance or other actions to protect the public health or welfare. The general pattern of operational response action is specified in the National Oil and Hazardous Substances Contigency Plan (40 CFR 1510.40). To insure that such actions are appropriate, the response plan should be carried out in consultation with and approval of the On-Scene Coordinator as defined in 40 CFR 1510.36.

4. *Definition of Mixture:*

It was suggested that the definition of mixture is too simplistic because it fails to recognize that the interactions of the two or more substances could produce a third substance more or less toxic than either of the substances being combined.

If two or more substances are chemically combined to form a non-hazardous substance, which is then discharged, there is no violation of section 311, but there may be violation of other sections of the Act or of other laws such as the Resource Conservation and Recovery Act. On the other hand if such substances combine to form a hazardous substance there is a violation of section 311. Further, if a hazardous substance is discharged followed by a discharge of another substance which renders the first substance harmless, the violation of section 311 caused by the first discharge is not obviated by the discharge of the second substance. However, mitigation efforts may be considered by the Administrator in determining which penalty to apply, as provided in Part 119.

Dated: March 3, 1978.

DOUGLAS M. COSTLE,
*Administrator.*

Part 117 is added as follows:

Sec.
117.1 Applicability.
117.2 Definitions.
117.3 Determination of actual removability.

AUTHORITY: Secs. 311 and 501(a), Federal Water Pollution Control Act, (33 U.S.C. 1251 et seq.).

§ 117.1 Applicability.

This regulation makes a determination under section 311(b)(2)(B)(i) of the Federal Water Pollution Control Act (the Act) as to the actual removability of substances designated under section 311(b)(2)(A). This regulation applies to substances designated as hazardous under 40 CFR part 116.

§ 117.2 Definitions.

Terms used in this part shall have the meanings as stated in 40 CFR part 116 and as indicated below:

"Mixture" means any combination of two or more elements and/or compounds in solid, liquid or gaseous form except where such substances have undergone a chemical reaction so as to become inseparable by physical means.

"Remove" or "removal" refers to removal of the oil or hazardous substances from the water and shorelines or the taking of such other actions as may be necessary to minimize or mitigate damage to the public health or welfare, including, but not limited to, fish, shellfish, wildlife, and public and private property, shorelines, and beaches.

"Actually be removed" means the separation and isolation of discharged hazardous substances from the waters by chemical, physical, or biological means.

§ 117.3 Determination of actual removability.

It is determined that the following substances designated as hazardous under 40 CFR part 116 can actually be removed: Allyl chloride, amyl acetate, benzene, cyclohexane, ethylbenzene, isoprene, methyl methacrylate, styrene, toluene, xylene. All other elements, compounds or their structural isomers, or mixtures thereof designated as hazardous substances under 40 CFR part 116 are determined to be not actually removable. The determination that certain designated substances cannot actually be removed by chemical, physical, or biological means does not relieve the discharger or third party from damage mitigation liabilities under sections 311(f) and 311(g) of the Act.

[FR Doc. 78-6340 Filed 3-10-78; 8:45 am]

---

[6560-01]

[FRL 829-4]

## PART 118—DETERMINATION OF HARMFUL QUANTITIES FOR HAZARDOUS SUBSTANCES

AGENCY: Environmental Protection Agency.

ACTION: Final rulemaking.

SUMMARY: This regulation establishes new rules for the determinations of harmful quantities of hazardous substances, as required by a provision of the Federal Water Pollution

Control Act. This regulation should be read in conjunction with other new regulations for hazardous substances, which are also being promulgated today in this same separate part of the FEDERAL REGISTER, and which designate hazardous substances, removability, and rates of penalty.

EFFECTIVE DATES: June 12, 1978, except for vessels. The effective date for vessels is September 11, 1978.

FOR FURTHER INFORMATION CONTACT:

Kenneth M. Mackenthun, Director, Criteria and Standards Division (WH-585), Office of Water and Hazardous Materials, U.S. Environmental Protection Agency, 401 M Street SW., Washington, D.C. 20460 (phone: 202-755-0100).

SUPPLEMENTARY INFORMATION: The Administrator of the Environmental Protection Agency proposed in the FEDERAL REGISTER of December 30, 1975 (40 FR 59982), to create a new part 118 in title 40 of the code of Federal Regulations which made a determination of harmful quantities under section 311(b)(4) of the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.) (the Act), for substances designated under section 311(b)(2)(A) of that Act. At the same time the designation of hazardous substances, determination of actual removability, and establishment of units of measurement and penalty rates were also proposed as parts 116, 117, and 119 respectively. Final promulgation of those regulations is concurrent with this rulemaking.

*Method for determining harmful quantities.* The December 30, 1975, proposal (40 FR 59982-89) described a procedure developed for determining harmful quantities based on a hazardous material classification system found in Annex II of the International Conference on Marine Pollution, 1973, which was submitted by the Intergovernmental Maritime Consultative Organization (IMCO) to member nations for adoption. The Agency indicated that a number of modifications to the basic IMCO system were required to satisfy the requirements of section 311. The modifications required were then used by the Agency in developing the table described at 40 FR 59988 as Table I, EPA Guidelines for Categorizing Hazardous Materials, which was to be used in conjunction with acute toxicity in determining harmful quantities.

Since the December 30, 1975, proposal, the Agency has reevaluated the use and appropriateness of the modified IMCO guidelines for categorizing hazardous substances. It was found that the IMCO guidelines and the proposed modifications to them required various subjective judgments, and relied, to some extent, on rather ill-defined effects such as biochemical oxygen demand, reduction of amenities, and the tainting of seafood. Further, these effects were not utilized in the proposed determination of harmful quantities. Therefore, this final rulemaking simplifies the categorization process to employ only the acute aquatic toxicity of the designated substances in deriving the harmful quantity categories. A result of this simplification is that substances for which no acute toxicity data are available are not categorized. As explained in the preamble to part 116 published elsewhere in this issue of the FEDERAL REGISTER, only two substances, adiponitrile and acetone cyanohydrin were proposed solely because of toxicological effects other than aquatic. Since that time, aquatic toxicity data for acetone cyanohydrin which support its final designation have become available. No similar supporting data for adiponitrile have become available and that substance was deleted from the final listing of hazardous substances. Although not used in the present rulemaking action, part 116 adopts selection criteria dealing with acute toxic effects to mammals and plants. At such time that those or other selection criteria are utilized for the designation of hazardous substances, this simplified system for categorizing substances according to their relative potential for harm will be supplemented.

Toxicological data for individual substances used in determining harmful quantities were derived from the compendium of information fact sheets entitled, Hazardous Substances Facts Sheets, 1977, which are available from the Environmental Protection Agency. In addition, other primary sources of data were: Water Quality Criteria Federal Water Pollution Control Administration, 1968, Water Quality Criteria 1972, EPA, March 1973, and quality Criteria for Water, EPA 440/9-76-023, July 1976.

*Comments.* Interested persons were given until March 1, 1976, to submit written comments concerning all aspects of the proposed rules. Each of the comments received has been carefully considered in adopting the final rules which are promulgated at this time.

1. *Special waters.* Many comment letters addressed the definition of Special Waters and the proposed determination that any quantity of a designated substance discharged to these waters constituted a harmful quantity. A majority of those commenting on this point believed the proposal lacked adequate definition or justification and would not result in a workable approach.

Special waters were proposed to be defined as those waters which are: (1) Drinking water reservoirs; (2) part of a designated National Wildlife Refuge System; or part of a designated National Forest Wilderness, a designated National Park System, or a designated National Wilderness Preserve System.

It was argued that the term "any quantity" was vague, and that the criminal nature of penalties for failure to notify demanded a definitive measure of a violation. It was also pointed out that the boundaries of waters proposed as special waters were neither clearly defined nor marked in such a way that the person responsible for giving notice could instantly recognize or differentiate between various waters. Thus, this lack of definition placed an additional and unfair burden on potential dischargers. It was further argued that the proposed harmful quantities were of such a magnitude that they provided an adequate level of protection for all waters.

On the other hand, several commenters suggested that the definition of "special waters" should be expanded to include State and locally defined parks and wildlife areas, tributaries to National wildlife refuges, forests, wildernesses and parks, and sources of drinking water in addition to reservoirs.

After review of the practical and legal implications of the proposed approach, the Agency is in agreement with the position that because of the criminal nature of penalties for failure to provide notice under section 311(b)(5), the lack of easily discernible marked boundaries for special waters makes the proposed approach impractical. The Agency further believes that the magnitude of quantities proposed as harmful and adopted by this rulemaking provide meaningful protection to those waters proposed as "special waters." Accordingly, the proposed provision concerning discharge of hazardous substances into special waters is deleted from this final rule.

2. *Demonstrable harm.* Many comment letters expressed the opinion that the proposed harmful quantities and the method for their derivation were inappropriate. It was suggested that the harmful quantity should be directly related to actual harm or demonstrable damage to the environment from each discharge. It was argued that the concentration of a toxic material in the water dictated whether or not damages or harm would occur. Thus, the characteristics of the receiving water body including type, size, and flow rate, all influence the toxicity and must be considered in the derivation of the harmful quantity. Other commenters argued that salinity, hardness, temperature, and biological populations of the water body further modify the actual impact of a hazardous substance discharge and should be considered.

Section 311(b)(4) requires that the determination of harmful quantities

be made by regulation in advance of any specific discharge situation. It is recognized that the degree of harm to environmental health is dependent primarily upon the concentration of the substance in the receiving water and that the pollutant concentration is dictated in large part by the type, flow rate, and size of the water body. It is further recognized that the ultimate degree of harm or damage is also a function of many other characteristics of receiving water bodies such as salinity, hardness, alkalinity, dissolved oxygen, turbidity, biological population, buffering capacity, and beneficial uses. Recognition of the numerous factors which influence the ultimate expression of harm or damages resulting from the discharge of a hazardous substance would preclude a before-the-fact quantitative evaluation of harm. The number of potentially influencing factors and their possible combinations would render any predictive model based on them entirely too cumbersome for regulatory application.

Similar to the problems discussed under the special waters provision, the boundaries and differentiation of various waters are not clearly defined nor readily discernible. The discharger, particularly from a transportation source, is not equipped to differentiate between large and small streams, estuaries and rivers, or rivers and lakes. Adoption of such an approach using variable harmful quantities depending on water body type or size would place dischargers in the position of facing criminal penalties for failure to immediately notify without having the means to make the determination that a violation has occurred. As pointed out by the numerous comments on the proposed special waters provision, such a nondefinitive determination would place an unfair burden on dischargers. The proposed approach, identifying a single harmful quantity applicable to all waters, provides a clear and definitive threshold for activation of the reporting requirement. The inclusion of numerous variables which may accompany a particular discharge and modify the harmful quantity would create uncertainty in the notification requirement which is unacceptable in light of the criminal penalty provisions for failure to give notice and the importance of prompt activation of response activities through such notice. The proposed approach adopted by this rulemaking is responsive to the requirements of the Act and the harmful quantity is defined in terms of the unit of measurement concept and the relative degree of hazard presented by each chemical. Because the determination must be made *a priori*, no individualized assessment of harm or damage is feasible.

The Clean Water Act of 1977 (Pub. L. 95-217) contained a number of amendments to section 311 of the Federal Water Pollution Control Act including, as noted in the preamble to Part 116, amendments extending the coverage of section 311 out beyond the contiguous zone. In the debates on the conference report concerning these amendments Senator Muskie states:

> The amendments to section 311 underscore the importance of this section and the need for completion of long-delayed regulatory action with respect to hazardous substances and determination of removability, harmful quantities and rates of penalty are major actions, the Administrator is expected only to make a reasonable effort to make these judgments. These are nationally applicable, before-the-fact decisions and are not expected to reflect the myriad of actual circumstances that may occur.
>
> Congressional Record at S19653 (December 15, 1977).

This statement illustrates the principle that harmful quantity determinations, as well as designation of substances as hazardous and determinations of removability and rates of penalty, are to be based on the characteristics of the substance and not on the circumstances surrounding the discharge. Although discharges of the same substance to different bodies of water may result in different degrees of environmental harm, it is neither required by the statute nor practical to establish varying harmful quantities. In this connection it is significant that the Clean Water Act of 1977 amended section 311(b)(4) to delete the provision establishing a different test for a harmful quantity of oil in the contiguous zone than for other waters. As Senator Muskie's statement demonstrates, Congress was aware that requiring tailoring of such determinations to water body type and other circumstances is administratively unwise and could prevent achievement of the goals of the Act.

The question as to how EPA should implement the extension of the coverage of section 311 is really only a subset of the issue discussed above. The decision, arrived at with full public participation, to adopt uniform harmful quantities (and designations, determinations of removability, and rates of penalty) provides the answer. Moreover, nothing in the Clean Water Act of 1977 or its legislative history indicates that the extended coverage of section 311 was to be implemented differently in this respect than in other waters. In fact, as noted above, the contrary appears to be true. Thus, it is fully appropriate that the same provisions of Parts 116, 117, 118, and 119 which apply to other waters, also apply beyond the contiguous zone.

3. *Time of discharge.* Many comment letters addressed the fact that a discrete period of time was not proposed or associated with the determination of harmful quantity. The majority of comments on this point expressed the opinion that the harmful quantities had little meaning unless a time period for discharge of the quantity was specified. It was argued that the discharge of 2 pounds of a category A substance over a time period of 2 months would cause significantly less environmental impact than the discharge of the same amount over a time period of 2 minutes. A number of the commenters suggested specific time periods to be associated with the harmful quantity. Suggested limits ranged from 5 minutes to one month.

Neither section 311 of the Act nor its legislative history limit the applicability of section 311 to spill-type discharges of hazardous substances. Thus, implementing regulations under section 311 may be applied to any discharge over any length of time. However, the primary thrust of these regulations has been directed toward the control of short-term nonroutine discharges of hazardous substances. The association of a maximum time limit over which the discharge of a harmful quantity must occur to result in a violation will provide additional definition to the reporting requirement under section 311(b)(5). For the purpose of this regulation a maximum time period associated with the discharge of a harmful quantity has been established as 24 hours. It is believed that this time period will permit regulatory control over such discharges of hazardous substances and provide an additional degree of resolution to the reporting requirement. It is noted that a 24 hour average or maximum discharge limit is the shortest time period specified in typical NPDES permits or associated reporting and monitoring requirements.

4. *Changes in harmful quantity categories.* Several comment letters addressed the categorization of certain specific substances suggesting that new or existing data justified alternative categories. These petitions were made, in some cases, on the basis of data selectively quoted from information utilized by the Environmental Protection Agency in deriving the proposed categorization. In other cases, additional data were submitted by commenters to support their argument. A review of all proposed harmful quantities was also suggested.

In each case, the specific information utilized by the Agency in arriving at a harmful quantity category was carefully reviewed against the new data submitted. In addition, all remaining harmful quantity categories were reviewed by the Agency. As a result of this thorough review of the harmful quantity categories, category changes have been made.

Changes in harmful quantity categories were made for about 60 substances as a result of this review with changes

from categories of higher relative toxicity to less toxic categories approximately equal to changes in the opposite direction. In terms of the direction of change, most of the changes are in agreement with suggestions from commenters. The exception usually was in cases where a commenter without benefit of supporting data requested that a material be moved from one category to a less harmful category or be removed from the list. For further information see the *Hazardous Substances Fact Sheets, 1977.*

5. *Consideration of bioaccumulation.* Several commenters suggested that the consideration of bioaccumulation could be clarified by use of more quantitative criteria for assessing the magnitude of accumulation.

The simplification of the catgorization process explained earlier in the preamble discontinued the consideration of bioaccumulation. However, it is anticipated that future criteria may employ the assessment of bioaccumulation and to the extent possible that assessment will include quantitative evaluation of the effects of bioaccumulation.

6. *Magnitude of Harmful Quantities:* Numerous commenters expressed the view that the proposed harmful quantities were generally too low. Related to this some commenters pointed out an inequity in a harmful quantity category system that provides for a factor of ten difference between categories D and C, C and B, and B and A while permitting Category A to range over more than three orders of magnitude. Note Table II below from the December 30, 1975 proposal (40 FR 59889).

| Category | Representative range | Harmful quantity pounds (kilograms) |
|---|---|---|
| A | LC50<1 mg/l | 1.0 (0.454). |
| B | 1 mg/l10LC50<10 mg/l | 10 (4.54). |
| C | 10 mg/l0LC50<100 mg/l | 100 (45.4). |
| D | 100 mg/l0LC500500 mg/l | 500 (227). |

The Agency has, on the basis of the above comments, reevaluated the harmful quantity categories as well as each of the suggested alternatives. In doing so, rates of penalties for Category A substances were compared as a function of acute toxicities. Endrin, for example, with an acute toxicity of 0.000037 mg/l would incur a penalty of $360 a pound. On the other hand, cupric chloride with an acute toxicity of 0.91 mg/l (about one twenty five thousandth that of Endrin) would incur a penalty of $62 per pound, or almost 17 percent of that for the other highly toxic substance. The Agency agrees with the concern about inequity in the A category and is therefore adding another category, the details of which are described below.

Several alternatives were proposed by commenters for modifying the harmful quantity system. The most practical of those and the one which has been accepted is to add a new category before Category A which we shall call Category X, in which substances with LC50 values of less than 0.1 mg/l are included, and to designate for this Category X the basic unit of one pound as the harmful quantity. The designated harmful quantities for Categories A, B, C, and D are then changed to 10, 100, 1,000 and 5,000 pounds respectively. Category A then retains only the acute toxicity range 0.1 LC50 1 ppm. Categories B, C, and D retain their LC50 ranges as proposed. The modified harmful quantity system is shown in table below:

| Category | Toxicity range | Harmful quantity pounds (kilograms) |
|---|---|---|
| X | LC50<0.1 mg/l | 1.0 (0.454). |
| A | 0.1 mg/l0LC50<1 mg/l | 10 (4.54). |
| B | 1 mg/l0LC50<10 mg/l | 100 (45.4). |
| C | 10 mg/l0LC50<100 mg/l | 1,000 (454). |
| D | 100 mg/l0LC500500 mg/l | 5,000 (2,270). |

As mentioned earlier in this preamble and illustrated by the above table, the system for categorization has been simplified and is based solely on the ranges of aquatic toxicity. The overall effect of adding the additional Category X is that the harmful quantities proposed on December 30, 1975, have been increased. Due to the few data on recorded discharges, it is not possible to estimate the effect this change will have on the number of discharges exceeding the harmful quantity. Intuitively, it would appear that fewer discharges would exceed the present harmful quantity than those quantities proposed earlier. However, because these regulations generally apply to discharges which are the result of episodic events such as transportation and storage accidents and plant upsets, it is believed that the harmful quantities adopted by this Part 118 will regulate the bulk of those discharges which present an imminent and substantial threat to public health and welfare and the environment.

7. *Applicability:* A. Many comment letters expressed the opinion that the Applicability section proposed as Part 118.1 was inappropriate as it related to the section 402 National Pollutant Discharge Elimination System (NPDES) program. Most commenters believed that any association of section 311 regulations with an effluent discharge regulated under the NPDES program was redundant and exceeded the statutory authority of section 311. The primary alternative suggestion was that all holders of an NPDES permit be totally exempt from the provisions of section 311. The stated basis for this position was that violations of the NPDES permit are enforceable in their own right under section 309 and that additional reporting and enforcement provisions under section 311 were redundant, unnecessary, and burdensome. It was further argued that section 311 of the Act applied only to spills from sources other than an NPDES permitted facility.

As stated under the discussion of the "Time of Discharge," above, nothing in the Act limits the applicability of section 311 only to "spill-type" situations. However, the stated thrust and primary emphasis in these initial regulations (40 CFR Parts 116, 117, 118, and 119) is the control of spill-type or nonroutine discharge episodes. This policy of addressing such discharges as the priority area of concern does not preclude the application of section 311 to other discharges of hazardous substances. Section 311 provides important authorities and authorizes requirements not all of which are found in other sections of the Act. These include: (1) Immediate notification in the event of a discharge (section 311(b)(5)): (2) an organized Federal government plan to deal with pollution emergencies (section 311(c)(2)); (3) authority of the Federal government to respond to pollution emergencies and take actions to protect public health and welfare and the environment (section 311(c)(1)); (4) an established fund to support pollution emergency activities (section 311(k)); (5) responsible party liabilities for cleanup costs incurred by the Federal Government (sections 311(f) and (g)); and (6) removal and discharge prevention regulations (section 311(j)). The intent of the proposed applicability section was to clearly exclude discharges of hazardous substances which are permitted under other sections of the Act and related laws from the provisions of these regulations. Although violations of such other requirements may be enforced independently, no emergency response activities and the accompanying protection of public health such as those mentioned above are authorized. Therefore, discharges in violation of such requirements are in violation of section 311 as well.

The 24-hour discharge of a designated hazardous substance in a quantity equal to or exceeding its harmful quantity and in excess of the limitation in an NPDES permit issued pursuant to section 402 of the Act is a violation of these rules.

b. Some commenters pointed out that a discharger may not know for several days (the period required to do testing) whether his discharges violate his NPDES permit.

The requirement to provide notification arises when the discharger learns or should have known that he has made a discharge in a harmful quantity in violation of section 311(b)(4).

c. One comment letter pointed out that the State of California, under State statutory authority, issues permits for the application of calcium oxide to kelp beds for the control of sea urchins. Because the applicability section of the proposed rules did not specifically exclude such discharges, there was concern that continued use of calcium oxide in California waters may constitute a violation of section 311.

The beneficial uses of substances designated as hazardous in Part 116 have been recognized by the exclusion of certain activities permitted under Federal law. The benefits of calcium oxide addition to waters containing commercial kelp beds are also recognized and the applicability section of this final rule is amended to exclude discharges permitted under §165.7 of Title 14 of the California Administrative Code. A similar modification is made in 40 CFR Part 119.1.

d. In regard to the exclusion from applicability for activities permitted under section 404 of the Act or section 103 of the Marine Protection, Research and Sanctuaries Act of 1972, it was pointed out that permits are not issued for Congressionally authorized projects. Accordingly, it was suggested that the language be changed to reflect compliance with the sections of law rather than the specific permit.

The suggested alternative is adopted in this final rulemaking.

e. Several commenters questioned whether discharges of materials for mitigation purposes would subject the discharger to further penalties. For example, base materials listed as hazardous substances might be discharged to neutralize acid discharges, thus subjecting the discharger to potential penalties for discharge of base materials.

The Agency believes that it would be contrary to the spirit of the law to penalize persons for undertaking mitigation actions which are encouraged under section 311. At the same time, the Agency believes that care must be exercised in carrying out mitigation actions. The Agency intends to promulgate removal regulations at a later date. Accordingly, the Agency has clarified the applicability of the regulations by amending §118.1 (and 119.1) to provide that mitigation actions undertaken on the instructions or with the approval of the Federal On-Scene Coordinator pursuant to 40 CFR 1510 (The National Oil and Hazardous Substance Contingency Plan), or pursuant to 33 CFR §153.105(c) (Pollution by Oil or Hazardous Substances), or in accordance with applicable section 311(j)(1)(A) regulations, when promulgated, do not violate section 311.

Dated: March 3, 1978.

DOUGLAS M. COSTLE,
*Administrator.*

Part 118 is added as follows:

Sec.
118.1 Applicability.
118.2 Abbreviations.
118.3 Definitions.
118.4 Determination of Harmful Quantities.
118.5 Demonstration Projects.
118.6 Notice.
118.7 Penalties.
118.8 Liabilities.

AUTHORITY: Secs. 311 and 501(a), Federal Water Pollution Control Act (33 U.S.C. 1251 *et seq.*, (the Act)) and Executive Order 11735.

### §118.1 Applicability.

This regulation makes a determination of the harmful quantity for each substance designated as hazardous in 40 CFR Part 116. The regulation applies to quantities of designated substances equal to or greater than those set forth below, except to the extent that the owner or operator can show such discharges are made (1) in compliance with the requirements of sections 301, 302, 304, 306, 307, 318 and 403 of the Act, and in compliance with a National Pollutant Discharge Elimination System (NPDES) permit which has been issued pursuant to section 402 of the Act, (2) in compliance with Section 404 of the Act or in compliance with a permit issued under the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1401 *et seq.*), (3) in compliance with approved water treatment plant operations as specified by local, State or Federal regulations pertaining to safe drinking water, (4) pursuant to the label directions for application of a pesticide product registered under 40 CFR Part 162 (FEDERAL REGISTER, Vol. 40, No. 129, Part II, pp. 28242-28286, July 3, 1975) by authority of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended by the Federal Environmental Pesticide Control Act of 1972 (Pub. L. 92-516, 86 Stat. 973; Pub. L. 94-140, 86 Stat. 751; 7 U.S.C. 136 *et seq.*), (5) in compliance with the regulations issued under section 3004 of the Resource Conservation and Recovery Act, 90 Stat. 2795; 42 U.S.C. 6901, (6) in compliance with instructions of the On-Scene Coordinator pursuant to 40 CFR 1510 (the National Oil and Hazardous Substance Contingency Plan) or 33 CFR §153.105(c) (Pollution by Oil and Hazardous Substances) or in accordance with applicable removal regulations as required by §311(j)(1)(A), (7) in compliance with a permit issued under Section 165.7 of Title 14 of the State of California Administrative Code, or (8) from a properly functioning inert gas system when used to provide inert gas to the cargo tanks of a vessel. For the purpose of this Part 118.1, compliance with an NPDES permit means a discharge during a 24 hour period of a designated hazardous substance (40 CFR Part 116) when such discharge is equal to or less than the maximum daily amount expressly allowed in such permit, or is equal to or less than the average daily discharge for a hazardous substance not limited expressly in the permit, but as disclosed in the permit application.

### §118.2 Abbreviations.

lb equals pound.
kg equals kilogram.
HQ equals harmful quantity.

### §118.3 Definitions.

As used in this part, all terms shall have the meanings stated in 40 CFR Parts 116 and 117.

### §118.4 Determination of harmful quantities.

The quantity listed with each substance in Table 118.4 is determined to be the harmful quantity for that substance. The harmful quantities of mixtures or solutions are considered additive based upon the proportions of the individual elements or compounds as follows. For a mixture or solution of substance X, substance Y, and substance Z, etc., the weight of substance X discharged is divided by the harmful quantity of pure substance X, and so forth. Next, the fractions so derived are added. If the total equals or exceeds unity, then the harmful quantity of the mixture or solution has been equaled or exceeded.

TABLE 118.4—HARMFUL QUANTITIES OF HAZARDOUS SUBSTANCES

NOTE.—The first number under the column headed "HQ" is the harmful quantity in pounds. The number in parentheses is the metric equivalent in kilograms. The column headed "Category" lists the EPA Category associated with each substance.

| Material | Category | HQ in pounds (kilograms) |
|---|---|---|
| Acetaldehyde | C | 1,000 (454). |
| Acetic acid | C | 1,000 (454). |
| Acetic anhydride | C | 1,000 (454). |
| Acetone cyanohydrin | A | 10 (4.54). |
| Acetyl bromide | D | 5,000 (2,270). |
| Acetyl chloride | D | 5,000 (2,270). |
| Acrolein | X | 1 (0.454). |
| Acrylonitrile | B | 100 (45.4). |
| Aldrin | X | 1 (0.454). |
| Allyl alcohol | B | 100 (45.4). |
| Allyl chloride | C | 1,000 (454). |
| Aluminum sulfate | D | 5,000 (2,270). |
| Ammonia | B | 100 (45.4). |
| Ammonium acetate | D | 5,000 (2,270). |
| Ammonium benzoate | D | 5,000 (2,270). |
| Ammonium bicarbonate | D | 5,000 (2,270). |
| Ammonium bichromate | C | 1,000 (454). |
| Ammonium bifluoride | D | 5,000 (2,270). |
| Ammonium bisulfite | D | 5,000 (2,270). |
| Ammonium carbamate | D | 5,000 (2,270). |
| Ammonium carbonate | D | 5,000 (2,270). |
| Ammonium chloride | D | 5,000 (2,270). |
| Ammonium chromate | C | 1,000 (454). |
| Ammonium citrate | D | 5,000 (2,270). |
| Ammonium fluoborate | D | 5,000 (2,270). |
| Ammonium fluoride | D | 5,000 (2,270). |
| Ammonium hydroxide | C | 1,000 (454). |
| Ammonium oxalate | D | 5,000 (2,270). |
| Ammonium silicofluoride | C | 1,000 (454). |

| Material | Category | HQ in pounds (kilograms) |
|---|---|---|
| Ammonium sulfamate | D | 5,000 (2,270). |
| Ammonium sulfide | D | 5,000 (2,270). |
| Ammonium sulfite | D | 5,000 (2,270). |
| Ammonium tartrate | D | 5,000 (2,270). |
| Ammonium thiocyanate | D | 5,000 (2,270). |
| Ammonium thiosulfate | D | 5,000 (2,270). |
| Amyl acetate | C | 1,000 (454). |
| Aniline | C | 1,000 (454). |
| Antimony pentachloride | C | 1,000 (454). |
| Antimony potassium tartrate | C | 1,000 (454). |
| Antimony tribromide | C | 1,000 (454). |
| Antimony trichloride | C | 1,000 (454). |
| Antimony trifluoride | C | 1,000 (454). |
| Antimony trioxide | D | 5,000 (2,270). |
| Arsenic disulfide | D | 5,000 (2,270). |
| Arsenic pentoxide | D | 5,000 (2,270). |
| Arsenic trichloride | D | 5,000 (2,270). |
| Arsenic trioxide | D | 5,000 (2,270). |
| Arsenic trisulfide | D | 5,000 (2,270). |
| Barium cyanide | A | 10 (4.54). |
| Benzene | C | 1,000 (454). |
| Benzoic acid | D | 5,000 (2,270). |
| Benzonitrile | C | 1,000 (454). |
| Benzoyl chloride | C | 1,000 (454). |
| Benzyl chloride | B | 100 (45.4). |
| Beryllium chloride | D | 5,000 (2,270). |
| Beryllium fluoride | D | 5,000 (2,270). |
| Beryllium nitrate | D | 5,000 (2,270). |
| Butyl acetate | D | 5,000 (2,270). |
| Butylamine | C | 1,000 (454). |
| Butyric acid | D | 5,000 (2,270). |
| Cadmium acetate | B | 100 (45.4). |
| Cadmium bromide | B | 100 (45.4). |
| Cadmium chloride | B | 100 (45.4). |
| Calcium arsenate | C | 1,000 (454). |
| Calcium arsenite | C | 1,000 (454). |
| Calcium carbide | D | 5,000 (2,270). |
| Calcium chromate | C | 1,000 (454). |
| Calcium cyanide | A | 10 (4.54). |
| Calcium dodecylbenzenesulfonate | C | 1,000 (454). |
| Calcium hydroxide | D | 5,000 (2,270). |
| Calcium hypochlorite | A | 10 (4.54). |
| Calcium oxide | D | 5,000 (2,270). |
| Captan | A | 10 (4.54). |
| Carbaryl | B | 100 (45.4). |
| Carbon disulfide | D | 5,000 (2,270). |
| Chlordane | X | 1 (0.454). |
| Chlorine | A | 10 (4.54). |
| Chlorobenzene | B | 100 (45.4). |
| Chloroform | D | 5,000 (2,270). |
| Chlorpyrifos | X | 1 (0.454). |
| Chlorosulfonic acid | C | 1,000 (454). |
| Chromic acetate | C | 1,000 (454). |
| Chromic acid | C | 1,000 (454). |
| Chromic sulfate | C | 1,000 (454). |
| Chromous chloride | C | 1,000 (454). |
| Cobaltous bromide | C | 1,000 (454). |
| Cobaltous formate | C | 1,000 (454). |
| Cobaltous sulfamate | C | 1,000 (454). |
| Coumaphos | A | 10 (4.54). |
| Cresol | C | 1,000 (454). |
| Cupric acetate | B | 100 (45.4). |
| Cupric acetoarsenite | B | 100 (45.4). |
| Cupric chloride | A | 10 (4.54). |
| Cupric nitrate | B | 100 (45.4). |
| Cupric oxalate | B | 100 (45.4). |
| Cupric sulfate | A | 10 (4.54). |
| Cupric sulfate ammoniated | B | 100 (45.4). |
| Cupric tartrate | B | 100 (45.4). |
| Cyanogen chloride | A | 10 (4.54). |
| Cyclohexane | C | 1,000 (454). |
| 2,4-D Acid | B | 100 (45.4). |
| 2,4-D Esters | B | 100 (45.4). |
| DDT | X | 1 (0.454). |
| Diazinon | X | 1 (0.454). |
| Dicamba | C | 1,000 (454). |
| Dichlobenil | C | 1,000 (454). |
| Dichlone | X | 1 (0.454). |
| 2,2-Dichloropropionic acid | D | 5,000 (2270). |
| Dichlorvos | A | 10 (4.54). |
| Dieldrin | X | 1 (0.454). |
| Diethylamine | C | 1,000 (454). |
| Dimethylamine | C | 1,000 (454). |
| Dinitrobenzene | C | 1,000 (454). |
| Dinitrophenol | C | 1,000 (454). |
| Diquat | C | 1,000 (454). |
| Disulfoton | X | 1 (0.454). |
| Diuron | B | 100 (45.4). |
| Dodecylbenzenesulfonic acid | C | 1,000 (454). |
| Endosulfan | X | 1 (0.454). |
| Endrin | X | 1 (0.454). |
| Ethion | A | 10 (4.54). |
| Ethylbenzene | C | 1,000 (454). |
| Ethylenediamine | C | 1,000 (454). |
| EDTA | D | 5,000 (2,270). |
| Ferric ammonium citrate | C | 1,000 (454). |
| Ferric ammonium oxalate | C | 1,000 (454). |
| Ferric chloride | C | 1,000 (454). |
| Ferric fluoride | B | 100 (45.4). |
| Ferric nitrate | C | 1,000 (454). |
| Ferric sulfate | C | 1,000 (454). |
| Ferrous ammonium sulfate | C | 1,000 (454). |
| Ferrous chloride | B | 100 (45.4). |
| Ferrous sulfate | C | 1,000 (454). |
| Formaldehyde | C | 1,000 (454). |
| Formic acid | D | 5,000 (2,270). |
| Fumaric acid | D | 5,000 (2,270). |
| Furfural | C | 1,000 (454). |
| Guthion | X | 1 (0.454). |
| Heptachlor | X | 1 (0.454). |
| Hydrochloric acid | D | 5,000 (2,270). |
| Hydrofluoric acid | D | 5,000 (2,270). |
| Hydrogen cyanide | A | 10 (4.54). |
| Isoprene | C | 1,000 (454). |
| Isopropanolamine dodecylbenzenesulfonate | C | 1,000 (454). |
| Kelthane | D | 5,000 (2,270). |
| Lead acetate | D | 5,000 (2,270). |
| Lead arsenate | D | 5,000 (2,270). |
| Lead chloride | D | 5,000 (2,270). |
| Lead fluoborate | D | 5,000 (2,270). |
| Lead fluoride | C | 1,000 (454). |
| Lead iodide | D | 5,000 (2,270). |
| Lead nitrate | D | 5,000 (2,270). |
| Lead stearate | D | 5,000 (2,270). |
| Lead sulfate | D | 5,000 (2,270). |
| Lead sulfide | D | 5,000 (2,270). |
| Lead thiocyanate | D | 5,000 (2,270). |
| Lindane | X | 1 (0.454). |
| Lithium chromate | C | 1,000 (454). |
| Malathion | A | 10 (4.54). |
| Maleic acid | D | 5,000 (2,270). |
| Maleic anhydride | D | 5,000 (2,270). |
| Mercuric cyanide | X | 1 (0.454). |
| Mercuric nitrate | A | 10 (4.54). |
| Mercuric sulfate | A | 10 (4.54). |
| Mercuric thiocyanate | A | 10 (4.54). |
| Mercurous nitrate | A | 10 (4.54). |
| Methoxychlor | X | 1 (0.454). |
| Methyl mercaptan | B | 100 (45.4). |
| Methyl Methacrylate | D | 5,000 (2,270). |
| Methyl parathion | B | 100 (45.4). |
| Mevinphos | X | 1 (0.454). |
| Mexacarbate | C | 1,000 (454). |
| Monoethylamine | C | 1,000 (454). |
| Monomethylamine | C | 1,000 (454). |
| Naled | A | 10 (4.54). |
| Naphthalene | D | 5,000 (2,270). |
| Naphthenic acid | B | 100 (45.4). |
| Nickel ammonium sulfate | D | 5,000 (2,270). |
| Nickel chloride | D | 5,000 (2,270). |
| Nickel hydroxide | C | 1,000 (454). |
| Nickel nitrate | D | 5,000 (2,270). |
| Nickel sulfate | D | 5,000 (2,270). |
| Nitric acid | C | 1,000 (454). |
| Nitrobenzene | C | 1,000 (454). |
| Nitrogen dioxide | C | 1,000 (454). |
| Nitrophenol | C | 1,000 (454). |
| Paraformaldehyde | C | 1,000 (454). |
| Parathion | X | 1 (0.454). |
| Pentachlorophenol | A | 10 (4.54). |
| Phenol | C | 1,000 (454). |
| Phosgene | D | 5,000 (2,270). |
| Phosphoric acid | D | 5,000 (2,270). |
| Phosphorus | X | 1 (0.454). |
| Phosphorus oxychloride | D | 5,000 (2,270). |
| Phosphorus pentasulfide | C | 1,000 (454). |
| Phosphorus trichloride | D | 5,000 (2,270). |
| Polychlorinated biphenyls | A | 10 (4.54). |
| Potassium arsenate | C | 1,000 (454). |
| Potassium arsenite | C | 1,000 (454). |
| Potassium bichromate | C | 1,000 (454). |
| Potassium chromate | C | 1,000 (454). |
| Potassium cyanide | A | 10 (4.54). |
| Potassium hydroxide | C | 1,000 (454). |
| Potassium permanganate | B | 100 (45.4). |
| Propionic acid | D | 5,000 (2,270). |
| Propionic anhydride | D | 5,000 (2,270). |
| Pyrethrins | C | 1,000 (454). |
| Quinoline | C | 1,000 (454). |
| Resorcinol | D | 5,000 (2,270). |
| Selenium oxide | C | 1,000 (454). |
| Sodium | C | 1,000 (454). |
| Sodium arsenate | C | 1,000 (454). |
| Sodium arsenite | C | 1,000 (454). |
| Sodium bichromate | C | 1,000 (454). |
| Sodium bifluoride | D | 5,000 (2,270). |
| Sodium bisulfite | D | 5,000 (2,270). |
| Sodium chromate | C | 1,000 (454). |
| Sodium cyanide | A | 10 (4.54). |
| Sodium dodecylbenzenesulfonate | C | 1,000 (454). |
| Sodium fluoride | D | 5,000 (2,270). |
| Sodium hydrosulfide | D | 5,000 (2,270). |
| Sodium hydroxide | C | 1,000 (454). |
| Sodium hypochlorite | B | 100 (45.4). |
| Soduim methylate | C | 1,000 (454). |
| Sodium nitrite | B | 100 (45.4). |
| Sodium phosphate, dibasic | D | 5,000 (2,270). |
| Sodium phosphate, tribasic | D | 5,000 (2,270). |
| Sodium selenite | C | 1,000 (454). |
| Strontium chromate | C | 1,000 (454). |
| Strychnine | A | 10 (4.54). |
| Styrene | C | 1,000 (454). |
| Sulfuric acid | C | 1,000 (454). |
| Sulfur monochloride | C | 1,000 (454). |
| 2,4,5-T Acid | B | 100 (45.4). |
| 2,4,5-T Esters | B | 100 (45.4). |
| TDE | X | 1 (0.454). |
| Tetraethyl lead | B | 100 (45.4). |
| Tetraethyl pyrophosphate | B | 100 (45.4). |
| Toluene | C | 1,000 (454). |
| Toxaphene | X | 1 (0.454). |
| Trichlorfon | X | 1 (0.454). |
| Trichlorophenol | A | 10 (4.54). |
| Triethanolamine dodecylbenzenesulfonate | C | 1,000 (454). |
| Triethylamine | D | 5,000 (2,270). |
| Trimethylamine | C | 1,000 (454). |
| Uranyl acetate | D | 5,000 (2,270). |
| Uranyl nitrate | D | 5,000 (2,270). |
| Vanadium pentoxide | C | 1,000 (454). |
| Vanadyl sulfate | C | 1,000 (454). |
| Vinyl acetate | C | 1,000 (454). |
| Xylene | C | 1,000 (454). |
| Xylenol | C | 1,000 (454). |
| Zinc acetate | C | 1,000 (454). |
| Zinc ammonium chloride | D | 5,000 (2,270). |
| Zinc borate | C | 1,000 (454). |
| Zinc bromide | D | 5,000 (2,270). |
| Zinc carbonate | C | 1,000 (454). |
| Zinc chloride | D | 5,000 (2,270). |
| Zinc cyanide | A | 10 (4.54). |
| Zinc fluoride | C | 1,000 (454). |
| Zinc formate | C | 1,000 (454). |
| Zinc hydrosulfite | C | 1,000 (454). |
| Zinc nitrate | D | 5,000 (2,270). |
| Zinc phenolsulfonate | D | 5,000 (2,270). |
| Zinc phosphide | C | 1,000 (454). |
| Zinc silicofluoride | D | 5,000 (2,270). |
| Zinc sulfate | C | 1,000 (454). |
| Zirconium nitrate | D | 5,000 (2,270). |
| Zirconium potassium fluoride | D | 5,000 (2,270). |
| Zirconium sulfate | D | 5,000 (2,270). |
| Zirconium tetrachloride | D | 5,000 (2,270). |

### § 118.5 Demonstration projects.

Notwithstanding any other provision of this Part, the Administrator of the Environmental Protection Agency may permit, on a case-by-case basis, the discharge of harmful quantities of designated hazardous substances in connection with research, demonstration projects, or studies relating to the prevention, control, or abatement of hazardous substance pollution.

### § 118.6 Notice.

Any person in charge of a vessel or an onshore or an offshore facility shall, as soon as he has knowledge of any discharge of a designated hazard-

ous substance from such vessel or facility in quantities equal to or exceeding in any 24-hour period the harmful quantity determined by this Part, immediately notify the appropriate agency of the United States Government of such discharge. Notice shall be given in accordance with such procedures as the Secretary of Transportation has set forth in 33 CFR Part 153.

§ 118.7 Penalties.

(a) Any person in charge of a vessel or an onshore or offshore facility who fails to notify immediately the United States Government of discharges of hazardous substances designated in 40 CFR Part 116 equal to or exceeding in any 24-hour period those quantities determined to be harmful as set forth in this Part (except in the case of a discharge beyond the contiguous zone, a person in charge of a vessel not otherwise subject to the jurisdiction of the United States) shall be subject to not more than $10,000 or imprisonment for not more than one year or both pursuant to section 311(b)(5).

(b) The owner or operator of a vessel or onshore or offshore facility from which is discharged a hazardous substance designated in 40 CFR Part 116 in a quantity equal to or exceeding in any 24-hour period the harmful quantity established in this Part (except in the case of a discharge beyond the contiguous zone, a person in charge of a vessel not otherwise subject to the jurisdiction of the United States) shall be assessed a civil penalty of up to $5,000 under section 311(b)(6).

(c) The owner or operator of a vessel or onshore or offshore facility from which is discharged a hazardous substance designated in 40 CFR Part 116, shall, subject to the defenses to liability provided in section 311(f), be subject to a civil penalty assessed under Section 311(b)(2)(B)(iii) as set forth in 40 CFR Part 119, provided that such hazardous substance shall have been determined in 40 CFR Part 117, not to be actually removable, and provided further that the quantity of such hazardous substance discharged equals or exceeds in any 24-hour period the harmful quantity established in this Part.

§ 118.8 Liabilities for removal.

In any case where a substance designated as hazardous in 40 CFR Part 116 is discharged from any vessel or onshore or offshore facility in a quantity equal to or exceeding the harmful quantity determined by this Part, the party or parties liable pursuant to sections 311(f) and (g) of the Act shall be liable to the United States Government for the actual costs incurred in the removal of such substance, subject only to the defenses and monetary limitations enumerated in sections 311(f) and (g) of the Act. Removal refers to removal of the hazardous substance from the water and shorelines or the taking of such other actions as may be necessary to minimize or mitigate damage to the public health or welfare, including, but not limited to, fish, shellfish, wildlife, and public and private property, shorelines, and beaches.

[FR Doc. 78-6341 Filed 3-10-78; 8:45 am]

---

[6560-01]

[FRL 829-5]

## PART 119—DETERMINATION OF UNITS OF MEASUREMENT AND RATES OF PENALTY FOR HAZARDOUS SUBSTANCES

AGENCY: Environmental Protection Agency.

ACTION: Final rulemaking.

SUMMARY: This regulation establishes new rules which set forth the methods and procedures for determining and assessing civil penalties for the discharge of hazardous substances in harmful quantities in violation of Section 311 of the Federal Water Pollution Control Act. It also includes units of measurement and rates of penalty for particular substances which may be utilized as the basis for computing the penalty. This regulation should be read in conjunction with other regulations which are also being promulgated today in this same separate part of the FEDERAL REGISTER, and which designate hazardous substances, removability, and harmful quantities, respectively.

EFFECTIVE DATES: June 12, 1978, except for vessels. For vessels the effective date is September 11, 1978.

FOR FURTHER INFORMATION CONTACT:

Kenneth M. Mackenthun, Director, Criteria and Standards Division (WH-585), Office of Water and Hazardous Materials, U.S. Environmental Protection Agency, 401 M Street SW., Washington, D.C. 20460, phone: 202-755-0100.

SUPPLEMENTARY INFORMATION: On December 30, 1975, the Administrator of the Environmental Protection Agency proposed in the FEDERAL REGISTER (40 FR 59999) to create a new Part 119 in Title 40 of the Code of Federal Regulations. In that publication, units of measurement and rates of penalty for hazardous substances as required under section 311(b)(2)(B)(iv) of the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), (the Act) were proposed. At the same time the designation of hazardous substances, determination of actual removability, and determination of harmful quantities were proposed as Parts 116, 117, and 118 respectively. Final promulgation of those regulations is concurrent with this rulemaking.

Interested persons were given until March 1, 1976, to submit written comments on all aspects of the proposed rules. More than a third of all comment letters addressed some aspects of penalty assessment. Each of those comments has been carefully considered in adopting the rules which are promulgated at this time. Those areas of substantive comment are discussed below, following a general statement concerning the content of the regulations.

### A. PRINCIPAL FEATURES OF THE REGULATIONS

#### 1. UNIT OF DISCHARGE AND PENALTY RATE

Section 311(b)(2)(B)(iii) of the Act subjects the owner or operator of any vessel, onshore facility, or offshore facility from which there is discharged any hazardous substance which has been determined to be not actually removable (see 40 CFR Part 117) to either of two alternative civil penalties. The first, under subsection (aa) thereof, is to be based on "the toxicity, degradability, and dispersal characteristics of the substance" and is not to exceed $5,000. The second, under subsection (bb) thereof, is determined by the number of units discharged multiplied by the rate of penalty under section 311(b)(2)(B)(iv) of the Act, as implemented in section 119.5 of this Part, and may be up to $5 million in the case of a discharge from a vessel and $500,000 in the case of a discharge from an onshore or offshore facility.

Section 119.4 of these regulations enumerates the factors to be considered in selection of the penalty provision. In the section as proposed on December 30, 1975, the discriminator between the two sections was "gross negligence." Because of the difficulty of proving gross negligence, and the absence of such a discriminator in the applicable statutory language, a number of commenters were critical of the Agency's adoption of this standard. In response to the suggestions of these commenters, the Agency has reconsidered its position, and in the regulations promulgated at this time has adopted a discriminator based on the gravity of the offense. The factors which must be considered by the Regional Administrator in selecting a penalty include the size of the discharge, the culpability of the owner, the extent of any mitigation or cleanup efforts, and any other factors which he finds relevant under the circumstances. It should be noted that the choice of penalty as provided in the Act is "in the discretion of the Administrator."